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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,577	03/25/2004	Kenji Kaneko	P25048	5557

7055 7590 12/20/2005

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EXAMINER

ALSOMIRI, ISAM A

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/808,577	Applicant(s) KANEKO ET AL.	
	Examiner Isam Alsomiri	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/938,663.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>092905</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. US 5,877,892 in view of Kusaka US005578812A.

Re claim 1, Nakamura discloses in figures 1-16, a surveying instrument comprising: a sighting telescope optical system through which a sighting object can be sighted (see Abstract, col. 7 lines 55-61); a distance measuring system which measures a distance to the sighting object; and a phase detection autofocus system which detects a focus state of an image of the sighting object on a reference focal plane (see figure 14, col 6 lines 50-67); and an AF driver 30 which moves a focusing lens 12 of the sighting telescope optical system to bring the sighting object into focus in accordance with an output of the phase detection autofocus system (see col. 7 lines 5-12); Nakamura is silent about teaching a selector for setting a consecutive distance measurement mode in which said distance measuring system performs plural measurements of distances to said sighting object; and a controller which coordinates focusing operations of said AF driver with distance measuring operations of said distance measuring system in the consecutive distance measurement mode such that the AF driver operates concurrently with distance measuring operations of the distance

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measuring operations of the distance measuring system. Kusaka teaches an auto focus system which include a selector for setting a consecutive AF, which a include the claimed controller and performs plural measurements of distances to the object, the AF operates concurrently with the distance measuring system. (see col. 19 line 48 – col. 21 line 54). It would have been obvious to modify Nakamura's system to include a selection for consecutive AF for moving objects which require constant focusing.

Re claim 2, Kusaka teaches the consecutive AF mode and operation are initiated by a single push operation of a start button (by the selection device 70) (see col. 19 lines 25-47).

Re claim 3, it is inherent that Nakamura teaches the distance measuring system and the AF driver operate consecutively upon a single-push operation of the start button. However, event it is not inherent feature, it would be a design choice and it's well known to have the distance measuring system to operate with the AF with a single start button. It would have been obvious to have the distance measurement operation and AF operation to have the same start button since both need to work together.

Re claim 4, it is inherent that the consecutive autofocus mode starts at the same time as the consecutive distance measurement, because the autofocus is based on the distance to the target.

Re claim 5, Nakamura teaches a controller which drives the AF driver to move the focusing lens to a predetermined position thereof so that an object at a predetermined distance is in focus when the sighting object is unable to be brought into focus in the case of a measurement mode in which a target is set at an arbitrary point.

Re claim 6, Nakamura teaches the surveying instrument is a total station (see col. 14 lines 26-30).

Re claim 7, Nakamura teaches the distance measuring system comprises a distance meter having a light-emitting element and a light-receiving element (see col. 14 lines 45-48).

Re claim 8, Nakamura teaches the phase detection autofocus system comprises a pair of line sensors (see col. 6 lines 61-62).

Response to Arguments

Applicant's arguments filed September 29, 2005 have been fully considered but they are not persuasive. Regarding claims 1-8, applicant argues that, "neither no Nakamura nor Kusaka discloses an AF driver which operates concurrently with distance measuring operations of a distance measuring system"; "Kusaka does not teach a selector for setting a consecutive distance measurement mode in which a distance measuring system performs plural measurements. In response, as mentioned in the office action that Nakamura teaches a surveying instruments with an AF capability for better distance measurements. Kusaka teaches a device which operates on different modes: single mode in which the AF is locked based on the distance measurement, and a continuous or the tracking modes which are mainly used for moving targets or objects. In the continuous/tracking modes require the consecutive distance measurements (see col. 20 line 45 – col. 21 line 15). Therefore, Nakamura in view of Kusaka can detect moving objects and being able to track objects and in the same time

measures the distance which require the auto focusing AF to following the target and adjust accordingly. The continuous/tracking mode selections read on the selector for consecutive measurements (pictures/distances for AF), furthermore, at least in the continuous/tracking modes AF and the distance measurements must operate together "concurrently" for the system to work.

In response to applicant's argument that Kusaka is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

Regarding claims 3 and 4, as mentioned above the combination of Nakamura and Kusaka teaches the consecutive distance measurements (for moving targets), and it is inherent that the consecutive autofocus mode starts at the same time as the consecutive distance measurement, because the autofocus is based on the distance to the target. How else would the continuous distance measurements are detected, the continuous AF is needed, therefore, it is inherent.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam Alsomiri whose telephone number is 571-272-6970. The examiner can normally be reached on Monday-Friday 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isam Alsomiri



December 12, 2005



THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
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